## **HIKES**

All hikes are 1 hour long and outdoors.

# Pre K – 2nd Grade Budding Biologists Hike

September 7 - October 14, 2011 and February 1 - May 11, 2012

What do Biologists study? Discover the great outdoors and learn to distinguish between living and non-living things. Using tools of inquiry, work as field scientists to examine the forest floor.

### 3rd – 8th Grade Seasonal Hikes

September 7 - December 9, 2011 and February 1 - May 11, 2012

Discover the seasons and what's happening in the forest through observations and hands-on outdoor activities. Each hike is unique as students observe the natural changes occurring throughout the year.

# Large Group Program Options for all Grades

## **Double Group Programs**

Wednesdays & Thursdays
Group Size
Pre K – K: 21-40 students;
1st - 12th: 26-50 students.
Minimum time scheduled:
Pre K – K: 1½ hours; 1st - 12th: 2 hours

## **Triple Group Programs**

Wednesdays & Fridays
Group Size
Pre K – K: 41 - 60 students;
1st - 12th: 51 - 75 students.
Minimum time scheduled: 2½ hours
Includes a Teacher led rotation.

### **Quadruple Group Programs**

Wednesdays & Fridays
Group Size
Pre K – K: 61 - 80 students;
1st - 12th: 76 - 100 students.
Minimum time scheduled: 3 hours
Includes two teacher led rotations.

11715 Cragwold Rd. St. Louis, MO 63122

**Powder Valley Conservation** 

**Nature Center** 

Attention: Reservations for the 2011 - 2012 school year begin Wednesday, August 10, 2011.

# **Reservation Information**

Reservations Begin Wednesday, August 10, 2011

Programs are offered Wednesday - Friday 9:30 a.m. - 2:30 p.m. September 7, 2011, through May 11, 2012 (No programs are offered in January.)

Reservations must be made by a school representative. Tuesday - Friday, 8:30 a.m. - 4:30 p.m. Call (314) 301-1500

Requests are limited to one reservation per class per school year.

We encourage and welcome adults to accompany the groups. We often put them to work as team leaders or as active helpers. Guidelines for the minimum number of adults are specified under age group descriptions.

All programs offered at Powder Valley fulfill Grade Level Expectations. For more information on how a program corresponds to the GLEs, call Powder Valley at (314) 301-1500.

# **Powder Valley School Programs**

2011 - 2012

Reservations Begin Wednesday, August 10, 2011

Call (314) 301-1500
Classes fill up quickly so please call early to reserve your date.

Programs are offered September 7, 2011 through May 11, 2012 (No programs are offered in January.)



We help people discover nature.



# Pre K – 2<sup>nd</sup> Grade

Programs are 1 ½ hours for Pre K and K levels and 2 hours for 1st and 2nd grades and include both indoor and outdoor components. We suggest one adult chaperone per four students.

#### **Bird Buddies**

Pre K – K

September 7 - December 9, 2011 and February 1 - May 11, 2012

Explore the characteristics of birds through hands-on activity and mimicry. Go on a bird hike and make a pair of binoculars to take home.

# I Like to Move It, Move It! Pre K – K

September 7 - December 9, 2011 and February 1 - May 11, 2012

Take a close look at animal movement and behavior. Learn how animals use different parts of their body to function and survive in the wild. Dramatic play, live animals, and a hike will be a part of this "moving" experience!

# Feeling Froggy! Pre K - K

September 7 – October 14, 2011 and April 4 - May 11, 2012

How do frogs grow? How are they different from other animals? Discover the answers to these questions through mimicry, live animals, and a pond study.

# Furry, Feathered, Scaly, or Smooth? Pre K – 2nd Grade

September 7 - December 9, 2011 and February 1 - May 11, 2012

Want to learn what animals feel like and how their outer layer keeps them protected? We've got you covered! Warm up to the world of animal coverings and the special adaptations that help them to survive in their environments.

### **Insect Inspectors**

Pre K – 2nd Grade

September 7 – October 14, 2011 and April 4 - May 11, 2012

Did that critter have six legs or eight? Was it a spider or an insect? Catch and observe all kinds of insects living right under your nose and in the water.

#### Let's Pollinate!

Pre K – 2nd Grade

September 7 – October 14, 2011 and April 4 - May 11, 2012

Flowers can't walk, so how do they spread to different places? Pollinators! Learn about the stages of plant growth and some of the pollinators that make it happen.

### **Mammalogy for Minis**

Pre K – 2nd Grade

September 7 - December 9, 2011 and February 1 - May 11, 2012

Walk in the tracks of a deer.... burrow like a mole! Become a different mammal by observing and behaving like several Missouri mammals. Explore mammal traits and hike to find some furry residents of Powder Valley.

## **Get a Life Cycle!**

1st - 2nd Grade

September 7 – October 14, 2011 and April 4 - May 11, 2012

How do life cycles differ within the animal world? Explore metamorphosis and growth through the fascinating lives of insects, amphibians, and birds. Outdoors, search for animals in different life stages.

9<sup>th</sup>– 12<sup>th</sup> Grade Programs are available upon request.

# 3<sup>rd</sup> – 5<sup>th</sup> Grade

Most programs are 2 hours (unless otherwise noted) and include both indoor and outdoor components. We suggest one adult chaperone per six students.

### **Aquatic Ecology**

April 4 - May 11, 2012

What critter is that? It's swimming in circles! Practice the basics of aquatic collection techniques along with the investigation of live organisms. View macroinvertebrates indoors then head outdoors to collect and identify specimens before returning them to the water

#### **Arthropod Investigators**

September 7 – October 14, 2011 and April 4 - May 11, 2012

Did you know that all insects are arthropods, but not all arthropods are insects? We'll introduce animal taxonomy as we investigate each arthropod class. Learn about the special adaptations of arthropods and how to identify them by using a simple dichotomous key.

#### **Avian Adaptations**

September 7 - December 9, 2011 and February 1 - May 11, 2012

It's a bird! It's a plane! No, it's a bird! Learn to identify birds by specific physical and behavioral characteristics. Indoor hands-on activities illustrate adaptations of beaks, feet, and wings. Outdoors practice your observation skills while learning how to use a field guide.

#### **Creatures of Habitat**

September 7 - December 9, 2011 and February 1 - May 11, 2012

A habitat provides food, water, shelter, and space for the animals living there. It sounds nice and easy, but life in the wild is tough. Learn how animals use their diverse adaptations to survive in a habitat. Come prepared to explore the forest and pond habitats of Powder Valley.

# Predator-Prey: What makes Them That Way?

September 7 – October 14, 2011 and April 4 - May 11, 2012

Every animal species has its own way of finding its dinner. Some do this while they also avoid being dinner for someone else. Discover various adaptations which determine how and on whom different animals dine.

# 6th - 8th Grade

Most programs are 2 hours (unless otherwise noted) and include both indoor and outdoor components. We suggest one adult chaperone per eight students.

#### **Forest Explorations**

September 7 – October 14, 2011 and April 4 - May 11, 2012

What do forests mean to you.... or to wildlife? Discover the in's and out's of trees, how they work together to form an ecosystem and even how to identify several common Missouri trees. Test observation and judgment skills to determine the health of Powder Valley's trees using the Missouri Forestkeeper's tree observation methods.

### **Behavior Biologists**

Limited to Single Groups or Double Groups (This programs is 2 ½ hours)

September 7 - December 9, 2011 and February 1 - May 11, 2012

Gain first-hand experience to all steps of the Scientific Method! Jump into the shoes of a Research Biologist to study birds of prey and their menu of critters. Conduct an animal behavior study to see how wildlife responds to those hungry predators of the sky.

### Pond and Stream Ecology April 4- May 11, 2012

Limnology is the study of lakes, ponds, and rivers. Become a limnologist as you assess and compare the health of a pond and a stream through macro-invertebrate sampling and water testing. The majority of this program will be conducted outdoors.